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Relation between schizophrenic patients' quality of life and symptom severity

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Summary

The authors focus on the relation between the psychopathological pattern of schizophrenia and the patients' quality of life. The relation was studied in a group of sixty-six patients diagnosed with schizophrenia according to the criteria of DSM-III and followed up for 7 and 12 years after their first hospitalisation. The psychopathological picture of schizophrenia was described with the use of the BPRS (Californian version), while the quality of life was assessed with the use of the Questionnaire of the Quality of Life by Lehman. In the discussion of their research findings, the authors point to a different pattern of relations between the pathological picture and subjective and objective evaluation of the patients' quality of life.

Key words: schizophrenia, quality of life, schizophrenia

Introduction

For as long as almost two decades many researchers have demanded the introduction of the 'quality of life' (QL) as an independent indicator of treatment outcome in schizophrenia [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]. The measurement of QL is questioned by those who think that the patients' psychopathological condition may influence and thus distort their opinions on their subjective satisfaction with life [11].

Researches on the relation between QL and psychopathology show contradictory results. Some studies report a significant negative correlation between 'the positive syndrome' and QL [12, 13], some point to a similar relation between QL and 'the negative syndrome' [14, 15], whereas some other find a negative correlation between QL and either of the syndromes [12, 16, 17].

One should also mention a group of studies that negate any relation between QL and either the negative or the positive syndrome [4, 18, 19, 20, 21].

A number of researchers stress a negative correlation with the depression syndrome [13, 20, 22]. It must be emphasised, however, that the correlation exists in the phase of either inpatient or outpatient treatment, that is in the period of clinical in-

tensification of depression symptoms, and that it disappears some time after the patient is discharged and returns to his/her community [20]. Evenson et al. [23], on the other hand, think that it is mainly depression that diminishes satisfaction with life; what is more, they even maintain that depression and satisfaction with life, as general measurements of QL, are synonymous. Thus other researches on the relation between QL and the psychopathology of schizophrenics were aimed at verifying the reliability of the construct of the subjectively perceived QL. Researchers were interested in whether it is a particular, narrow construct similar to anhedonia (cf. question about depressed moods in the BRPS), or whether it is, in comparison, a more global and multidimensional construct. Corrigan and Buican [22] proved, with the use of regression analysis, that lowered subjective QL is a complex phenomenon which can be explained by several deficit domains in one's functioning, although in factor analysis, subjective QL at the stage of outpatient treatment turned out to correlate with the depression subscale of the BPRS.

Research was also carried out to analyse relations, among others, between particular questions of the BPRS and general subjective assessment of QL. The prospective study by Barry and Crosby [20] was aimed at checking the 'sensitivity' of subjective assessments of QL in various phases of the illness. The study proved that, in the same group of patients, the relation between QL and psychopathology is different at two different points of time. The relation exists during their hospital stay in the acute phase and disappears one year after discharge. The authors conclude that, besides psychopathology, other factors influence QL of psychiatric patients who live in their community.

Although relevant research is dominated by analyses of relations between the subjective assessment of QL and psychopathology, more and more frequently, especially in the 1990's, authors evaluated relations between the objective indicators of QL and the severity of symptoms [17, 18, 20, 22, 24, 25, 26].

Lauer and Stegmüller [25] as well as Packer [17] did not find any relation between psychopathology and the objective indicators of QL, apart from leisure activities. Simpson et al. [24] discovered in schizophrenic patients a significant correlation between affective symptoms, negative symptoms, motor retardation, the degree of deterioration and eight domains of QL: three subjective ones (subjective assessment of living conditions, social relations and health) and four objective ones (integration, scope of independence, social relations and leisure activities). Also in this study, the general assessment of QL was related in a statistically significant way to the severity of affective symptoms.

Another, usually unfavourable, measure of the course of schizophrenia and the severity of disorders is the number of hospital readmissions and, above all, their duration. The relation between the number and duration of repeated hospitalisations and QL would suggest a relation between QL and other indicators of the severity of the course of the illness. Meltzer et al. [12], who researched the influence of Clozapine on treatment outcome in a group of schizophrenic patients who were refractory to other neuroleptic treatment, proved that before receiving medication, patients display a negative correlation between the number of readmissions and subjective QL. The authors put forward two hypotheses to explain the relation: (1) hospital readmission has a negative impact on QL; (2) the most severely ill are more often readmitted.

After six months of Clozapine treatment, no relation was found between QL and the number of readmissions. The authors concluded this lack of relation suggested that even those patients with whom prognostic factors were unfavourable (male gender, older age, higher number of earlier admissions) have equal chances to improve their QL after a period of regular Clozapine treatment. However, such observations as the presence of correlation with various measures of treatment outcome, e.g. psychopathology during inpatient treatment and its disappearance during outpatient treatment, are common enough, independent of the kind of neuroleptic medication.

Aims of the study

This study is part of the Kraków prospective study on the quality of life at different follow-up points in the course of schizophrenia [27, 28, 29]. This is a longitudinal study which is primarily targeted at the assessment of the dynamics of change at subsequent follow-up points, seven and twelve years after the first admission. The main research aims were identified as follows:

1. Description of the subjective and objective indicators of the quality of life of schizophrenic patients seven years after their first admission.
2. Analysis of the construct of the 'quality of life': assessment of internal correlations and the impact of explanation factors.
3. Analysis of the relation between treatment outcome and the quality of life.
4. Assessment of the dynamics of the quality of life throughout the years of living with the illness, seven and twelve years after the first admission.

The aim of the present study was to explain the relation between QL of schizophrenic patients and selected 'treatment results'. The selected criteria in the assessment of 'treatment results' were: the severity of psychopathological symptoms, and the number and duration of repeated hospitalisations. The study was carried out seven years after the first psychiatric hospitalisation. Four detailed aims were identified as follows:

1. Assessment of the relation between general satisfaction with life as an indicator of QL and psychopathology as well as the number and duration of readmissions.
2. Analysis of the relation between the subjective indicators of QL in nine particular domains and psychopathology and the number and duration of readmissions.
3. Assessment of the relation between the objective indicators of QL in nine particular domains and psychopathology and the number and duration of readmissions.
4. Assessment of the complexity of the construct of the 'quality of life'.

The study group

The study group consisted of sixty-six patients diagnosed with schizophrenia according to DSM-III, residents of Kraków, seven years after their first inpatient hospitalisation. After the first hospitalisation at the Kraków Psychiatry Clinic, the surveyed, throughout the follow-up period, received individual treatment from the therapists from the Clinic, which ensured the continuity of the therapeutic process. The group was slightly dominated by women (58%), and patients who had secondary

(45%) and vocational education (21%). A relatively large group of 30% of the patients had higher education, which is typical of Kraków, where many universities are based. During their first psychiatric hospitalisation, one-third (33%) of the surveyed were married. In the seven-year follow-up period, ten patients got married (7 women and 3 men), one of whom later got divorced, similarly as two other patients, who had married before their first admission.

Very many (80%) of the surveyed either studied or worked (often their employment commenced before the first psychiatric admission). Only 11% of the patients neither worked nor studied at the moment of their first admission, while the modes of occupation or study of the remaining patients were varied. During the first seven years of the illness, a vast majority of the surveyed, over 50%, lost their jobs and received sickness benefit [29].

Method

Assessment of the quality of life. The study uses the Polish version of the *quality of life questionnaire* by Anthony Lehman [2]. Lehman's questionnaire was constructed in 1980 in order to assess the living standards of patients with severe mental disorders, especially schizophrenics. The questionnaire allows to evaluate both the subjective and objective quality of life in eight basic domains: living conditions, leisure activities, family relations, social relations, financial situation, employment or education, sense of safety and legal problems, and health. Lehman considered the possibility of the questionnaire's modification while the essential indicators in a given domain were to be preserved; he accepted also that whole domains may be added to or removed from the questionnaire, depending on the needs of research. In our study the questionnaire is supplemented with the domain of religion.

Parts which refer to particular areas of life are constructed in such a way that at first information is collected on the objective quality of life and then on the subjective response of the surveyed person. The obtained objective and subjective indicators of the quality of life in the investigated domains form the basis of the model for the assessment of the quality of life. All subjective indicators of the quality of life are obtained with the use of the seven-grade *scale of satisfaction*. The surveyed person selects one answer from those ranging from 'disappointed' to 'very satisfied'. Such a procedure focuses only the cognitive and not on the emotional aspects, as in the cases when an image of the face is used. The objective indicators refer, on the one hand, to the assessment of the patient's functioning, e.g. the frequency of social contacts or everyday activities; on the other hand, they refer to the accessibility of sources or the surveyed person's opportunity to use these sources, e.g. financial resources or kind of care.

General satisfaction with QL, as interpreted by Cheng [30], refers to a single opinion about life as a whole and amounts to the average of two answers: the answer to the first question ('How do you generally assess your life?') and the last question ('What is your perception of your life as a whole?') of the questionnaire. Subjective assessments from each investigated domain are summed up separately. The results for a given domain are the sum total of all the questions in this domain.

The *objective general assessment* of QL consists of the objective results in each of the nine domains and is the sum of selected questions in a given domain. The

assessment of living conditions refers to the accommodation and its standard; the assessment of leisure activities to all the ways of using free time during the last week; the assessment of family relations to the frequency of conversations with the family members; the assessment of social contacts to their frequency; the assessment of the financial situation to the amount of money earned in the last month from all the sources; the assessment of employment to the number of working hours from the last week; the assessment of the sense of safety to the cases of offence and crime against the surveyed person; the assessment of health to the sum of assessed physical functioning, social functioning and experienced pain. The indicator which was applied to assess the domain of religion is the frequency of attending church services.

In order to assess the severity of symptoms, a modified version of the BPRS scale was used [31], expanded from 18 to 24 points (BPRS-LA, Lukoff et al. [32]) and intended for outpatients. Within the BPRS-LA scale, three subscales were identified: the positive subscale (hostility, suspiciousness, unusual thought content, hallucinations, and formal disorders of the current of thoughts); the negative subscale (motor retardation, blunted affect, emotional withdrawal, poor grooming and lack of co-operation with the surveyor); and the depression subscale (anxiety about health, fear, low moods, sense of guilt, and suicidal thoughts and tendencies). Additionally, the severity of negative symptoms was assessed with the use of the NSA scale.

To verify research hypotheses, Spearman's rank correlation (rho) was applied.

Results

Presented below are the relation between psychopathology and the number and duration of readmissions, and the general subjective and objective assessments of the quality of life, and then detailed assessments of the nine investigated domains.

Relation between general satisfaction with QL and psychopathology

Table 1

Relation between general assessment of QL and psychopathology

Intensity of psychopathological symptoms	Subjective overall satisfaction with QL	General objective assessment of QL (sum total of objective indicators)
BPRS: sum total of symptoms	rho=-0.54 p=0.00	rho=-0.31 p=0.014
BPRS: positive subscale	rho=-0.43 p=0.00	rho=-0.24 ns
BPRS: negative subscale	rho=-0.43 p=0.00	rho=-0.28 p=0.028
BPRS: depression subscale	rho-0.49 p=0.00	rho=-0.078 ns
NSA: negative symptoms scale	rho=-0.35 p=0.00	rho=-0.33 p=0.012

rho: Spearman's rank correlation coefficient, p: level of significance, ns: not significant

General subjective satisfaction with QL shows a negative correlation with the overall severity of symptoms, with all the BPRS subscales (negative, positive and depression subscale) as well as with the severity of symptoms according to the NSA scale (Table 1). The correlations are moderate as they oscillate between -0.54 and -0.26. The more severe are the symptoms, especially depressive ones, the lower is general satisfaction with QL.

Another finding was the relation between the severity of the negative syndrome and the worse results in the general objective assessment of QL. It should be stressed that the correlation was found out with the use of two independent tools: the BPRS and the NSA scales, the latter being a very detailed one, which testifies to the validity of the expanded BPRS in clinical assessments. On the other hand, the severity of depression symptoms or positive symptoms did not correlate with the general objective assessment of QL.

The analysis of correlations between general subjective satisfaction with QL and the severity of particular symptoms points to significant relations with the symptoms from the depression, positive and negative BPRS subscales (Table 2). As many as four symptoms from the depression BPRS subscale, namely anxiety about health, low moods (which in the BPRS are connected with anhedonia), motor retardation and suicidal thoughts and tendencies, moderately, negatively correlated at a statistically significant level with the general subjective assessment of the quality of life.

General satisfaction with QL versus the number and duration of hospital readmissions

A negative correlation was found out between the number and duration of readmissions and the general objective assessment of QL (Table 3). Both the higher number of readmissions and their longer duration are connected with the lower objective indicators of QL, but are not related to the general subjective assessment of QL.

Table 2

Correlation between symptoms measured with BPRS and general satisfaction with life (only statistically significant figures)

BPRS scale: symptoms	General satisfaction with QL (Spearman's rank correlation coefficient)
D1 Anxiety about health	-0.39**
D2 Fear	-0.35**
D3 Low mood	-0.35**
P6 Distrust & suspiciousness	-0.33*
P7 Unusual thought content	-0.33**
N/D13 Motor retardation	-0.49**
N14 Blunted affect	-0.33**
N18 Emotional withdrawal	-0.26*
D19 Suicidal thoughts and tendencies	-0.28*
O21 Odd behaviour	-0.26*
P24 Conceptual disorganisation	-0.39**

So, as subjectively perceived by patients, these two measurements of a favourable course of schizophrenia and the effectiveness of therapy, though of much importance for clinical researchers, may be of lesser importance for patients, despite the fact that they are connected with the objectively worse circumstances. This is not the first, neither the last difference between the assessments of psychiatrists and patients. The result could support the traditional clinical observation that schizophrenic patients are less concerned about their financial situation and their social environment.

Table 3

Relation between general assessments of QL and number & duration of readmissions (only statistically significant figures)

Selected indicators of the course of schizophrenia	Subjective general satisfaction with QL	General objective assessment of QL (sum total of objective indicators)
Number of hospital readmissions	rho=-0.17 p=0.17	rho=-0.42 p=0.001
Total duration of hospital readmissions	rho=-0.22 p=0.07	rho=-0.45 p=0.000

rho: Spearman's rank correlation coefficient, p: level of significance

Table 4

Relations between 9 domains of subjective QL and psychopathology

Domains of QL	Scales				
	BPRS: sum total	BPRS: positive	BPRS: negative	BPRS: depression	NSA
Living conditions	ns	ns	ns	ns	ns
Leisure	rho=-0.33 p=0.008	rho=-0.27 p=0.036	ns	rho=-0.39 p=0.002	ns
Family	ns	ns	ns	ns	ns
Social relations	rho=-0.37 p=0.003	rho=-0.39 p=0.002	rho=-0.35 p=0.005	rho=-0.27 p=0.034	rho=-0.37 p=0.004
Financial situation	ns	ns	ns	ns	ns
Employment	ns	ns	ns	ns	ns
Sense of safety	ns	ns	ns	ns	ns
Health	rho=-0.37 p=0.003	rho=-0.26 p=0.039	rho=-0.29 p=0.024	rho=-0.33 p=0.009	ns
Religion	ns	ns	ns	ns	ns

rho: Spearman's rank correlation coefficient, p: level of significance, ns: not significant

Subjective domains of QL versus severity of symptoms

The subjective assessment of particular domains of QL showed a statistically significant, moderate negative correlation between the domains of health and social rela-

tions and the severity of symptoms in all the BPRS subscales and in the NSA scale, as well as a similar correlation between the domain of leisure with the positive and depression subscales (Table 4).

The coefficient figures are of a medium level and oscillate between -0.27 and -0.39. So, the more severe is the negative syndrome, the worse is the subjective assessment of health and social relations, while the severity of positive and depression symptoms is connected with a lower subjective assessment in three domains: leisure, social relations and health. These three particular domains contribute to the above described correlation with the general assessment of QL. Subjective satisfaction with living conditions, employment, safety, family, financial situation and religion does not seem to correlate with the severity of psychopathology.

Subjective domains of QL versus the number and duration of readmissions

Only one of the nine investigated domains which are indicators of subjective satisfaction with life, namely the financial situation (rho=-0.28, p=0.025), proved to be significantly correlated with the number of hospital readmissions. The correlation is a moderate and a negative one. Practically, neither the number nor the duration of repeated hospitalisations correlates with the subjective assessment of QL.

Objective domains of QL versus severity of symptoms

Table 5

Relations between 9 domains of objective QL and psychopathology

Domains of QL	Scales				
	BPRS: sum total	BPRS: positive	BPRS: negative	BPRS: depression	NSA
Living conditions	ns	r=-0.31 p=0.013	ns	ns	ns
Leisure	r=-0.41 p=0.001	r=-0.38 p=0.002	R=-0.36 P=0.004	r=-0.34 p=0.006	r=-0.48 p=0.00
Family	r=-0.25 p=0.047	ns	ns	ns	ns
Social relations	r=-0.33 p=0.008	r=-0.44 p=0.000	R=-0.40 P=0.001	r=-0.43 p=0.00	
Financial situation	r=-0.53 p=0.000	R=-0.46 P=0.000	R=-0.50 P=0.000	r=-0.34 p=0.007	r=-0.47 p=0.00
Employment	ns	ns	ns	ns	ns
Sense of safety	ns	ns	ns	ns	ns
Health	r=-0.43 p=0.000	r=-0.31 p=0.015	R=-0.31 P=0.015	r=-0.39 p=0.002	ns
Religion	ns	ns	ns	ns	ns

rho: Spearman's rank correlation coefficient, p: level of significance, ns: not significant

Among the objective domains, employment, sense of safety and religion show no relation to the severity of psychopathology (Table 5). Thus these three domains are not related to the severity of symptoms, either in the objective or the subjective assessment. A correlation exists with all the remaining domains, even though each of them has its special characteristics.

Leisure activities, social relations, health and financial situation correlate significantly, negatively and moderately not only with the sum total of symptoms measured with the BPRS, but also practically with all the subscales: of positive, negative and depression symptoms. The negative syndrome is negatively correlated with such objective domains as leisure activities, financial situation and the frequency of social contacts, irrespective of the method of measurement (BPRS or NSA scale). It is also correlated with the domain of health, but in this case the correlation changes depending on the method of measurement (BPRS vs. NSA scale). So, generally, the intensity of symptoms correlates with a lower level of everyday activities, a limited frequency of contacts with friends and acquaintances, a smaller amount of money earned in the last month, and an objectively worse health condition. Identical correlations are to be found in the analysis of the negative and depression syndromes (except for the domain of social relations).

The objective indicators of the living standard remain in a significant and negative correlation with the severity of positive symptoms measured with the BPRS. Family contacts correlate only, and then weakly, with the global severity of symptoms.

Objective domains of QL versus the number and duration of readmissions

Table 6

Relations between 9 domains of objective QL and number & duration of readmissions

Domains of objective QL	Number of readmissions	Duration of readmissions
Living conditions	ns	ns
Leisure	ns	ns
Family	ns	ns
Social relations	ns	ns
Financial situation	rho=-0.29 p=0.019	rho=-0.36 p=0.004
Employment	ns	ns
Sense of safety	rho=0.28	p=0.024
Health	ns	ns
Religion	rho=-0.33 p=0.008	rho=-0.31 p=0.013

rho: Spearman's rank correlation coefficient, p: level of significance, ns: not significant

Religion, sense of safety and financial situation correlate with the number of repeated hospitalisations. With finance and religion the correlation is a negative one, while with the sense of safety it is positive (Table 6).

If the surveyed spend more time in hospital and return there frequently, their religious life becomes less active (they participate in church services less frequently). Those who are more frequently victimised have a higher number of readmissions.

Relation between the construct of the quality of life according to Lehman and psychopathology

An attempt to assess the internal complexity of the construct of QL was made in a different publication [29]. The next research step was to find a relation between the construct of QL, as proposed by Lehman, and the psychopathological condition, not only by analysing the correlation between the subjective general assessment of satisfaction with QL and the severity of symptoms measured with the BPRS, but also by evaluating the contribution of particular syndromes to the explanation of variance or, in clinical terms, the extent of satisfaction with life as a measurement of its quality.

In order to evaluate the contribution of psychopathology to the explanation of general satisfaction with life, multiple stepwise regression was applied, with the use of the result of 'general satisfaction with life' as a dependent variable, whereas the independent variables were the BPRS (total sum of symptoms and three subscales: negative, positive and depression scale; see Table 5). The depression and the positive scale together explain a significant part of variance ($r=0.49$, $r^2=0.24\%$, $p=0.000$). The result points to an important contribution of psychopathology to the explanation of the subjective aspect of QL, and at the same time points to the fact that it is an even more complex construct which can be explained by other factors that have not been hitherto investigated.

Discussion of results

The present study attempts to explain the nature of relations between QL and psychopathology, and the number and duration of readmissions in a group of schizophrenic patients, seven years after their first admission. The study embraces sixty-six patients, diagnosed according to DSM-III, who live in their community.

A significant correlation between all the BPRS subscales (positive, negative and depression subscale) and general satisfaction with life confirms the hypothesis by Corrigan and Buican [22] that QL is a more global and multidimensional construct than anhedonia (which is included in the BPRS as low mood). Despite the fact that symptoms belonging to various syndromes showed a significant correlation with general satisfaction with life, in the model of multiple regression these variables could account only for 24% of variance. This figure, pointing to the relation, points at the same time to the influence of other variables, outside psychopathology, on general satisfaction with life.

The negative correlation between the subjective aspect of QL and the positive syndrome, as described in the Kraków study, corresponds with the results obtained by e.g. Meltzer [12] and Sullivan [13], while the correlation with the negative syndrome corresponds with the results of Lauer [14] and Browne et al. [15]. Our results confirm

also those obtained by Heslegrave [16] and Packer [17], who discovered a relation between subjective QL and both the positive and negative syndrome. Finally then we can confirm their opinion that psychopathology may have an impact on the structure of subjective quality of life. The relation between the BPRS depression subscale (and the four symptoms which form that subscale) and general satisfaction with QL was found out also by Evenson et al. [23], who similarly described a relation between the severity of depression symptoms and lower satisfaction with life.

The analysis of the above mentioned results confirms those findings that prove that the severity of psychopathological symptoms is related both to the general assessment of QL and to the subjective and objective assessments in particular domains. The relations, however, vary greatly.

The relations between the general severity of symptoms (the sum in the BPRS) and three subjective domains of QL, i.e. leisure activities, social relations and health, correspond with the results of Barry and Crosby [20], which were obtained in a group of outpatients, chiefly schizophrenics, one year after discharge, although in our study the correlation is not as strong and no correlation was found in the case of two domains, financial situation and sense of safety. Analogous to that of Barry and Crosby are also our results concerning the correlation between positive symptoms and subjective satisfaction with leisure activities, social relations and health. The presence of relations between the BPRS subscale of positive symptoms and general satisfaction with life suggests, according to the conclusions of other authors [22], that pharmacological and psychosocial interventions, which are aimed at diminishing positive symptoms, should exert their impact on general satisfaction with life.

The existence of a relation between general satisfaction with life and disorders of thought (form and content) in our study contradicts the results of Lehman [33] and Corrigan and Buican [22]. However, it is worth stressing that Corrigan and Buican did not take into consideration a single symptom of 'severity of thought disorders', contrary to the Kraków study, but used a 'bunch' of several symptoms (including thought disorders) that were put together as a result of factor analysis carried out by Overall et al. [34]. Because this group of symptoms did not prove to correlate significantly with general satisfaction, the authors concluded that there was no correlation between the two constructs, i.e. that changes in positive symptoms did not influence the quality of life. It may be surmised that the investigated group of symptoms resembles the group of symptoms from the BPRS positive subscale, which is, however weakly, related to general satisfaction with life. In the Kraków study only two positive symptoms from the BPRS subscale displayed a correlation with the general satisfaction with life. This means that only when they are integrated in a syndrome, positive symptoms may have more impact on general satisfaction with life.

Two other indicators of the course of schizophrenia which were used in the study, that is the number and duration of readmissions, did not show any correlation with the subjective quality of life. Only the total duration of all hospitalisations correlated significantly and negatively with the patients' satisfaction with their financial situation. These findings, different from the ones obtained by Browne et al. [15] and the ones obtained in the first phase of Meltzer's study [12], could suggest that seven years

after their first psychiatric admission, a group of schizophrenic patients included in the community treatment programme may display no relation between the subjectively perceived QL and the number and duration of readmissions. In turn, the aim of community care was to decrease the number and duration of readmissions, which influenced the subjective QL. The number and duration of readmissions were negatively correlated to a much greater extent with the general objective assessment of QL. The objectively worse quality of life was accompanied by the higher number and longer duration of hospitalisations. When we analyse the relation between the results of objective assessments in particular domains and the above mentioned two indicators, we see a correlation with finance and religion in the sense that the time spent in hospital correlates with lower income and infrequent religious practices.

The observable divergence between subjective and objective assessments confirms it once again that the aims of treatment, as defined by patients, and their influence on the subjective assessment of QL do not have to correspond entirely with the objective aims of treatment and the aims defined by therapists. Although an asset of this study is the analysis of a diagnostically homogeneous group, it was limited by numerous methodological concerns. First of all, ours was not a random sample: it included a population typical for a university town, and people with higher education were overrepresented (30%). It was a cross-sectional study, so significant relations between QL and the severity of psychopathology cannot be regarded in the cause-and-effect mode as this would require further prospective studies, thanks to which more comprehensive conclusions could be presented.

Conclusions

1. Psychopathology (severity of the positive, negative or depression syndrome) can influence general satisfaction with life in a group of schizophrenic patients who live in their community, outside hospital.
2. General satisfaction with life is a complex construct, which can be only partly explained by psychopathology.
3. The psychopathological condition is related to such particular subjective domains as leisure, social relations and health.
4. The objective indicators of the quality of life are related to the severity of psychopathological symptoms, especially with the negative syndrome. The severity of psychopathological symptoms in turn is related to particular objective domains such as leisure, social relations, financial situation and health.
5. The subjective assessment of satisfaction with life in schizophrenic patients, both general and in eight of the nine investigated domains, is not related to the number and duration of readmissions in the course of the seven years following the onset of the illness.
6. The number and duration of readmissions are related only to the objective quality of life, both general and in three particular domains: financial situation, sense of safety and religion.

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